

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,538	05/21/2001	Teddy Christian Johnson	10005473	1212

7590 07/15/2004

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

BRANCOLINI, JOHN R

ART UNIT PAPER NUMBER

2153

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/862,538	Applicant(s) JOHNSON, TEDDY CHRISTIAN	
	Examiner John R Brancolini	Art Unit 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1-17 are pending in the application.

#### ***Priority***

No claim for priority has been made. The effective filing date of the application is May 21, 2001.

#### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description:

Fig 1: Server Computing Node 100, Web Server 110, Client Process 120, Child Process 112, Resource Monitor 102, CPU Monitor element 104, Main memory element 106, Secondary storage monitor 108. The supplied Figure 1 does not seem to correspond to the Specification.

Similarly, Figure 2 does not seem to correspond to the Specification. Other than step 200, no element discussed in the Specification seems to correspond to the elements in the figure. The Specification includes elements 218, 220, 222 and 224, which are not included in Figure 2.

. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if

only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 10-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (US Patent 6,055,577), hereinafter referred to as Lee.

In regards to claim 1, Lee discloses a method for providing Web services comprising the steps of:

- Receiving a request from a Web client process wherein said request includes customer ID information (a request is made by either a real time or non-real time process, Figures 4 and 5, steps 410 and 510, and the request is received at the server).
- Spawning a program element operable on a computing node to process said request (a plurality of processes are formed by the server in response to a request by either a real time application, or a non-real time application, the

processes being spawned then controlled at the server in accordance with the identity of the requester, col 5 lines 12-36).

- Associating said customer ID information with the spawned program (each process spawned has an associated Customer ID information which includes I/O bit rate information associated with each process, col 5 lines 26-36).
- Allocating computing resources of said computing node to the spawned program element in accordance with said customer ID information associated with said request (appropriate bandwidth is allocated to each process based on the ID information, col 6 lines 10-39 for an overview of allocation).

In regards to claim 2, Lee discloses allocating a minimum level of resources to the spawned program element in accordance with said customer ID information (a minimum level of bandwidth is offered to each process based upon bandwidth available as well as the bandwidth required by the process, col 6 lines 10 – 26).

In regards to claim 3, Lee discloses allocating a maximum level of resources to the spawned program element in accordance with said customer ID information (a maximum level of bandwidth is provided to each process, col 5 line 64 – col 6 line 9).

In regards to claim 4, Lee discloses the customer ID information is encoded in a process name of each said spawned program element (each real time, or non-real time, process corresponds directly to an individual client which indicates the ID information is

encoded in the process name to maintain a system of monitoring the process identity as well as the process characteristics such as bit rate required, col 5 lines 26-36).

In regards to claim 5, Lee discloses the computing resources include processor time utilization (a file server handles all process requests, which means the server must allocate processor time to each process to ensure the real-time processes receive their accepted bit rate for transfers, col 5 lines 26-36).

In regards to claim 6, Lee discloses the computing resources include main memory utilization (assigning of the determined bandwidth to each process is for the allocating of main memory accessing and utilization, figure 2 shows the primary file server, or main memory, being accessed by the clients).

In regards to claim 7, Lee discloses the computing resources include secondary storage bandwidth utilization (the assigning of the bandwidth to each process may also be for a secondary storage area where files may be kept remotely by the server, figure 2 shows a remote secondary storage area controlled by a disk controller)

In regards to claim 8, Lee discloses a system for delivery of services in a client/server distributed environment comprising:

- A server computing node (fig 1 shows the file server).

Art Unit: 2153

- A server process operable on said server computing node for processing requests from a plurality of client processes coupled to said server computing node (a plurality of processes are formed by the server in response to a request by either a real time application, or a non-real time application, the processes being spawned then controlled at the server in accordance with the identity of the requester, col 5 lines 12-36).
- A plurality of server child processes operable on said server computing node and spawned by said server process to process said requests from said plurality of client processes wherein each child process of said plurality of server child processes is associated with customer ID information (each of the plurality of child processes spawned by the server has an associated Customer ID information which includes I/O bit rate information associated with each process, col 5 lines 26-36).
- A process resource manager operable on said server computing node to control allocation of resources of said server computing node among said plurality of server child processes wherein said resource manager is operable to control allocation of said resources in accordance with said customer ID information associated with said each child process (a process resource manager controls appropriate bandwidth allocation to each process based on the ID information, col 6 lines 10-39 for an overview of allocation).



In regards to claim 10, Lee discloses the process resource monitor further comprises:

- A CPU time resource monitor element for allocating CPU time to said each child process (a file server handles all process requests, which means the server must allocate processor time to each process to ensure the real-time processes receive their accepted bit rate for transfers, col 5 lines 26-36).
- A secondary storage bandwidth resource monitor for allocating secondary storage bandwidth to said each child process (the assigning of the bandwidth to each process may also be for a secondary storage area where files may be kept remotely by the server, figure 2 shows a remote secondary storage area controlled by a disk controller)
- A main memory resource monitor for allocating main memory to said each child process (assigning of the determined bandwidth to each process is for the allocating of main memory accessing and utilization, figure 2 shows the primary file server, or main memory, being accessed by the clients).

In regards to claim 11, Lee discloses a system for providing Web services comprising:

- Means for receiving a request from a Web client process wherein said request includes customer ID information (a request is made by either a real time or non-real time process, Figures 4 and 5, steps 410 and 510, and the request is received at the server).

- Means for spawning a program element operable on a computing node to process said request (a plurality of processes are formed by the server in response to a request by either a real time application, or a non-real time application, the processes being spawned then controlled at the server in accordance with the identity of the requester, col 5 lines 12-36).
- Means for associating said customer ID information with the spawned program (each process spawned has an associated Customer ID information which includes I/O bit rate information associated with each process, col 5 lines 26-36).
- Means for allocating computing resources of said computing node to the spawned program element in accordance with said customer ID information associated with said request (appropriate bandwidth is allocated to each process based on the ID information, col 6 lines 10-39 for an overview of allocation).

In regards to claim 12, Lee discloses means for allocating a minimum level of resources to the spawned program element in accordance with said customer ID information (a minimum level of bandwidth is offered to each process based upon bandwidth available as well as the bandwidth required by the process, col 6 lines 10 – 26).

In regards to claim 13, Lee discloses means for allocating a maximum level of resources to the spawned program element in accordance with said customer ID

Art Unit: 2153

information (a maximum level of bandwidth is provided to each process, col 5 line 64 – col 6 line 9).

In regards to claim 14, Lee discloses the customer ID information is encoded in a process name of each said spawned program element (each real time, or non-real time, process corresponds directly to an individual client which indicates the ID information is encoded in the process name to maintain a system of monitoring the process identity as well as the process characteristics such as bit rate required, col 5 lines 26-36).

In regards to claim 15, Lee discloses the means for allocating includes means for allocating processor time utilization (a file server handles all process requests, which means the server must allocate processor time to each process to ensure the real-time processes receive their accepted bit rate for transfers, col 5 lines 26-36).

In regards to claim 16, Lee discloses the means for allocating includes means for allocating main memory utilization (assigning of the determined bandwidth to each process is for the allocating of main memory accessing and utilization, figure 2 shows the primary file server, or main memory, being accessed by the clients).

In regards to claim 17, Lee discloses the means for allocating includes means for allocating secondary storage bandwidth utilization (the assigning of the bandwidth to each process may also be for a secondary storage area where files may be kept

Art Unit: 2153

remotely by the server, figure 2 shows a remote secondary storage area controlled by a disk controller)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of the current application.

In regard to claim 9, Lee discloses the server process may be a Web server process, but fails to disclose the child process is a cgi-bin process. However, in the background portion of the application being examined, it is shown that a specific, complex Web browser client request is often referred to as a cgi-bin process (page 1 lines 25-30). These processes perform additional computation services on behalf of the requesting client.

It would have been obvious to one of ordinary skill at the time of the invention to modify Lee to include cgi-bin process requests as taught by the applicant in the discussion of related art to allow additional computational services to be performed on behalf of the requesting client.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Martin (US Patent 6154776), a method of maintaining configurations for processes on a network ensuring a level of quality of service.
- Goldszmidt et al. (US Patent 6308216), a system for routing service requests based on process identifiers and performance levels of various network elements.
- Vaid et al. (US Patent 6341309), a bandwidth management tool to insure a level of quality of service.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R Brancolini whose telephone number is (703) 305-7107. The examiner can normally be reached on M-Th 7am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRB



GLENDON B. BURGESS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100